(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau

Organization
International Bureau





(43) International Publication Date 11 November 2004 (11.11.2004)

PCT

(10) International Publication Number WO 2004/098021 A1

(51) International Patent Classification⁷:

H02J 7/00

(21) International Application Number:

PCT/SE2004/000641

(22) International Filing Date: 28 April 2004 (28.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0301252-3

30 April 2003 (30.04.2003) Si

(71) Applicant (for all designated States except US): CRE-ATOR TEKNISK UTVECKLING [SE/SE]; Rostugnsvägen 3, S-776 70 Vikmanshyttan (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MALEUS, Börje [SE/SE]; Tennringen 22, S-176 74 Järfälla (SE).

(74) Agent: DR LUDWIG BRANN PATENTBYRÅ AB; PO BOX 171 92, S-103 62 Stockholm (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

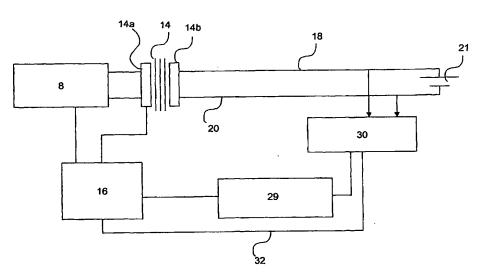
of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AT A BATTERY CHARGER



(57) Abstract: A method for charging a battery at a battery charger comprising connection means for connection to the terminals of a battery to be charged, means for detecting a voltage over the terminals of a connected battery, and control means. The method comprises the steps of initiating a burst cycle, wherein a plurality of consecutive voltage burst are applied to a connected battery to be charged, each burst successively lowering the internal resistance of the battery and initiating a charging cycle to charge the connected battery when said burst cycle has been terminated. Furthermore, a method for maintenance charging a battery at a battery charger including detecting a voltage over the connected battery; maintaining the voltage over the battery at a predetermined level for a predetermined period of time; monitoring a battery capacity parameter when said predetermined period of time has elapsed; and applying at least one voltage pulse if said parameter falls below a predetermined threshold level.

